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09/692,507	10/19/2000	Kenneth H. Abbott	294438005US1	7887

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EXAMINER
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HAILU, TADESSE

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/692,507

Applicant(s)

ABBOTT ET AL.

Examiner

Tadesse Hailu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 19 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-130 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 98-109 and 119-123 is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12,14,16-18,20-22,26,28-35,38,44,46-54,56-76,78,79,84-97,110-118 and 124-130 is/are rejected.
- 7) ☒ Claim(s) 8,13,15,19,23-25,27,36,37,39-43,45,55,77 and 80-83 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. This Office Action is in response to the patent application (09/692,507) filed 10/19/2000.
2. The present patent application is a CIP of 09/216,193 and claims priority from this CIP application.
3. The submitted Information Disclosure Statement with references is considered and entered in the application.
4. The pending claims 1-130 are examined as follows:

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 9-12, 14, 16-18, 20-22, 26, 28-35, 38, 44, 46-54, 56-76, 78-79, 84-97, 110-118, 124-130 are rejected under 35 U.S.C. 102(b) as being anticipated by Theimer et al.

#### With regard to claim 1:

Theimer teaches what is claimed in claim 1. Theimer describes information exchange between a user of a computing device and various information sources via a user agent. A user of a computing device requests information about an attribute value, such as location attribute value for an entity, during the request (query) the desire information variables (attributes) are identified. Based on the identified attribute the user agent gathers the necessary values (such as location) from the various information sources and provides the desired information value to the

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requestor. For example if the requestor is looking for the nearest device (printer), or the nearest person (friend), then the user agent contact the proximate sensor information source, or a GPS information source to feed the information to the user (requestor).

With regard to claims 2-4:

Theimer describes communication between processes in terms of Remote Procedure Call (RPS), wherein information includes in the form of function call (column 16, lines 36-44), message (column 15, lines 33-42), procedure and stack record (column 13, lines 22-40).

With regard to claims 5:

Theimer describes an information-storing unit for storing an information attribute value, wherein the stored value is provided to the requesting user (column 19, lines 23-41).

With regard to claim 6:

Theimer describes a plurality of information sources, such as location sensors, based on the requested information the particular information source is accessed via user agent to obtain the value. Once the value is obtained it is provided to the request user (column 17, lines 51-column 18, and lines 2).

With regard to claim 7:

Theimer describes providing units of the value for the identified attribute (column 17, lines 22-36).

With regard to claim 9:

Theimer further describes providing a timestamp for the identified attribute (column 13, lines 6-21).

With regard to claim 10:

Theimer further describes the identified attribute is information reflecting an aspect of the computing device (column 8, lines 29-36).

With regard to claim 11:

Theimer further describes the computing device has a visual output device (fig. 2, #64), and the identified attribute is information about the availability of the visual output device (column 8, lines 29-36).

With regard to claim 12:

Theimer further describes the computing device is present in an environment, and wherein the identified attribute is information reflecting an aspect of the environment, such as the location of the user in a room environment (fig. 1, column 6, lines 1-62).

With regard to claim 14:

Theimer further describes the identified attribute is information reflecting an aspect of the computing device user (fig. 2, 60) (column 8, lines 29-36).

With regard to claim 16:

Theimer further illustrates and describes and a plurality of applications, such as calendar, and user profile applications executing on the computing device (fig. 3), and wherein the identified attribute is information reflecting and aspect of an executing application (column 10, lines 20-38).

With regard to claim 17:

Theimer further describes electronic messaging (fig. 2, #90) application is among the applications executing on the computing device, and wherein the identified attributes indicates

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whether new messages have been received by the electronic messaging application (column 9, lines 55-57).

With regard to claim 18:

Theimer further illustrates a plurality of devices in a room environment (fig. 1).

With regard to claim 20:

Theimer illustrates and describes the computing device user (fig. 2, #60), and wherein the identified attribute is information reflecting an aspect of a selected user other than the user, such as user 62, fig. 2.

With regard to claim 21:

Theimer further describes that the selected person has a location, and wherein the identified attribute is the location of the selected person (column 10, lines 10-55).

With regard to claim 22:

Theimer further describes that the identified attribute is information reflecting an aspect of an identified user (column 10, lines 10-55).

With regard to claim 26:

Theimer further describes that the user agent saving the new value, new location of the user (column 10, lines 10-38).

With regard to claim 28:

As per "a value of the identified attribute is available from each of a plurality of sources, and wherein the invocation request further specifies one of the plurality of sources from which a value of the identified attribute is available, and wherein the value of the identified attribute provided to the requesting attribute consumer is from the specified source." (column 8, lines 62-

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column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 29:

As per “a value of the identified attribute is available from each of a plurality of sources, and wherein the invocation request further specifies to provide a value of the identified attribute from each of the sources from which a value of the identified attribute is available, and wherein a value of the identified attribute from each of the sources from which a value of the identified attribute is available is provided to the requesting attribute consumer.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 30:

As per “value of the identified attribute is available from each of a plurality of sources, and wherein the value of the identified attribute provided to the requesting attribute consumer is determined based upon the values of the identified attribute available from the plurality of sources.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 31:

As per “caching the value of the identified attribute provided to the requesting attribute consumer.” (column 10, lines 10-19; column 18, lines 47-57).

With regard to claim 32:

As per “a plurality of values of the identified attribute are available from different sources, and wherein the invocation request further specifies to select one of the plurality of

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available values of the identified attribute to provide, and wherein the value of the identified attribute provided to the requesting attribute consumer is selected from the plurality of available values of the identified attribute.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 33:

As per “a plurality of values of the identified attribute are available from different sources, and wherein the invocation request further specifies to determine a value of the identified attribute to provide that is based upon the plurality of available values of the identified attribute but different than each of the plurality of available values of the identified attribute, and wherein the value of the identified attribute provided to the requesting attribute consumer is based upon the plurality of available values of the identified attribute but different from each of the plurality of available values of the identified attribute.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 34:

As per “a plurality of values of the identified attribute are available from different sources, and wherein the invocation request further specifies to determine, from the plurality of available values of the identified attribute, one value of the identified attribute to provide, and wherein the value of the identified attribute provided to the requesting attribute consumer is determined from the plurality of available values of the identified attribute.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 35:



As per “the invocation request further specifies a basis for determining, from the plurality of available values of the identified attribute, one value of the identified attribute to provide, and wherein the value of the identified attribute provided to the requesting attribute consumer is determined from the plurality of available values of the identified attribute using the specified basis.” (column 8, lines 62-column 9, lines 57; column 13, lines 41-59; column 17, lines 31-43).

With regard to claim 38:

As per “the available values of the identified attribute are each requested and received from a different source, and wherein the invocation request further specifies selecting the first-received available value of the identified attribute, and wherein the value of the identified attribute provided to the requesting attribute consumer is the first-received available value of the identified attribute.” (column 8, lines 62-column 9, lines 57; column 13, lines 41-59; column 17, lines 31-43).

With regard to claim 44:

As per “the invocation request further specifies soliciting selection by a user of one of the available values of the identified attribute, and wherein the value of the identified attribute provided to the requesting attribute consumer is an available value of the identified attribute selected by the user.” (column 13, lines 41-59).

With regard to claim 46:

As per “the invocation request is received by a context characterization module, and wherein the context characterization module has an attribute under- its control, and wherein the

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invocation request identifies the attribute under the control of the characterization module, and wherein the attribute whose value is provided to the requesting attribute consumer is the attribute under the control of the characterization module.” (column 8, lines 62-column 9, lines 57; column 10, lines 10-55).

With regard to claim 47:

As per “before the invocation request to provide an attribute value is received, receiving from the attribute consumer an invocation request to register the attribute consumer.” (column 9, lines 24-37; column 18, lines 47-57).

With regard to claim 48:

As per “the invocation request to register an attribute consumer indicates that the requesting attribute consumer reserves an opportunity to later request provision of a value of the identified attribute, the method further comprising associating with the identified attribute an indication that the requesting attribute consumer is dependent on the identified attribute.” (column 13, lines 41-59).

With regard to claim 49:

As per “before the invocation request to provide an attribute value is received, receiving an invocation request to register an attribute source for the identified attribute, and wherein the method further comprises obtaining a value of the identified attribute from the attribute source with which the identified attribute is associated, and wherein the value of the attribute obtained from the attribute source with which the identified attribute is provided to the requesting attribute consumer.” (column 8, lines 62-column 9, lines 57; column 10, lines 10-55, and column 18, lines 47-57).

With regard to claim 50:

Independent claim 50 corresponds to method claim 1, thus rejected under the same rational.

With regard to claim 51:

As per “the computing device is a mobile computing device.” (see Fig. 2, #64).

With regard to claim 52:

As per “the computing device is a wearable computing device worn on the body of a human user.” (see Fig. 1, #26).

With regard to claim 53:

As per “an attribute value memory that contains a value of the identified attribute, wherein the attribute value contained in the attribute value memory is provided to the requesting attribute consumer by the attribute value provider.” (column 8, lines 62-column 9, lines 57).

With regard to claim 54:

As per “the identified attribute is associated with an attribute source, the computing device further comprising an attribute procurement subsystem that obtains a value of the identified attribute from the attribute source with which the identified attribute is associated, and wherein the value of the attribute obtained from the attribute source with which the identified attribute is provided to the requesting attribute consumer by the attribute value provider.” (column 8, lines 62-column 9, lines 8; column 28, lines 52-column 29, lines 16).

With regard to claim 56:

As per “a value of the identified attribute is available from each of a plurality of sources, and wherein the invocation request further specifies one of the plurality of sources from which a

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value of the identified attribute is available, and wherein the value of the identified attribute provided to the requesting attribute consumer by the attribute value provider is from the specified source.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 57:

As per “a value of the identified attributes is available from each of a plurality of sources, and wherein the invocation request further specifies to provide a value of the identified attribute from each of the sources from which a value of the identified attribute is available, and wherein a value of the identified attribute from each of the sources from which a value of the identified attribute is available is provided to the requesting attribute consumer by the attribute value provider.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 58:

As per “a value of the identified attribute is available from each of a plurality of sources, and wherein the value of the identified attribute provided to the requesting attribute consumer is determined based upon the plurality of values of the identified attribute available from different sources.” (column 17, lines 51-column 18, lines 2).

With regard to claim 59:

As per “a plurality of values of the identified attribute are available from different sources, and wherein the value of the identified attribute provided to the requesting attribute consumer by the attribute value provider is selected from the plurality of available values of the

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identified attribute.” (column 17, lines 51-column 18, lines 2; column 22, lines 32-column 23, lines 55).

With regard to claim 60:

As per “a plurality of values of the identified attribute are available from different sources, and wherein the value of the identified attribute provided to the requesting attribute consumer by the attribute value provider is based upon the plurality of available values of the identified attribute but different from each of the plurality of available values of the identified attribute.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 61:

A computer-readable medium 61, related to claim 1, and rejected under the same rational.

With regard to claim 62:

A computer-readable medium 62, related to claim 1, and rejected under the same rational.

With regard to claim 63:

As per “the invocation data structure is a function call stack record.” (column 16, lines 36-44).

With regard to claim 64:

As per “the invocation data structure is a function invocation message. (column 15, lines 33-42),

With regard to claim 65:

A computer-readable medium 65, related to claim 1, and rejected under the same rational.

With regard to claim 66:

As per “the attributes available in the computing device are each associated with an attribute source, and wherein the invocation request further specifies an attribute source, and wherein the list of available attributes provided to the requesting attribute consumer contains only those available attributes associated with the specified attribute source.” (column 17, lines 51-column 18, lines 2).

With regard to claim 67:

As per “each attribute available in the computing device has a name, and wherein the invocation request further specifies an attribute name pattern, and wherein the list of available attributes provided to the requesting attribute consumer contains only those available attributes whose names match the specified pattern.” (column 7, lines 52-column 8, lines 28).

With regard to claim 68:

Claim 68, a computer-readable medium, related to claim 1, and rejected under the same rational.

With regard to claim 69:

As per “the attributes available in the computing device are each associated with an attribute source, and wherein the invocation request further specifies an attribute source, and wherein the list of available attributes provided to the requesting attribute consumer contains only those available attributes associated with the specified attribute source.” (column 17, lines 51-column 18, lines 2).

With regard to claim 70:

Claim 70, a computer device claim, related to claim 1, and rejected under the same rational.

With regard to claim 71:

Claim 71, a computer memory claim, related to claim 1, and rejected under the same rational.

With regard to claim 72:

As per “each available attribute is associated with an attribute source, and wherein the invocation request further comprises information specifying an attribute source, such that an available attribute listing system receiving the invocation data structure could use its contents to provide a list of only those available attributes associated with the specified attribute source.” (column 8, lines 62-column 9, lines 57; column 17, lines 51-column 18, lines 40; column 22, lines 32-column 23, lines 55).

With regard to claim 73:

As per “A method in a computing device for exchanging context attributes, comprising: receiving an invocation request to register an attribute, the invocation request being generated by an attribute source, the invocation request identifying the attribute to be registered; and in response to receiving the invocation request, generating an indication that the identified attribute can be obtained from the attribute source.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37; column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 74:

As per “the invocation request further specifies a manner of invoking the attribute source to obtain the identified attribute from the attribute source, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified manner of invoking the attribute source to obtain the identified attribute from the attribute source.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37; column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 75:

As per “using the indication of the specified manner of invoking the attribute source included in the indication to invoke the attribute source to obtain the identified attribute from the attribute source.” (column 8, lines 62-column 9, lines 37).

With regard to claim 76:

As per “invoking the attribute source to obtain the identified attribute from the attribute source includes an identification of the attribute.” (column 21, lines 19-46).

With regard to claim 77:

As per “invoking the attribute source to obtain the identified attribute from the attribute source includes an indication of a maximum time in which the attribute source is expected to supply the identified attribute.” (column 8, lines 62-column 9, lines 37).

With regard to claim 78:

As per “receiving the identified attribute from the attribute source in response to invocation of the attribute source.” (column 8, lines 62-column 9, lines 37).

With regard to claim 79:



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As per “receiving the identified attribute from the attribute source includes a value of the attribute.” (column 17, lines 31-43).

With regard to claim 81:

As per “receiving the identified attribute from the attribute source includes an indication of the time at which the value of the attribute is most accurate.” (column 13, lines 41-59; column 20, lines 30-46).

With regard to claim 82:

As per “receiving the identified attribute from the attribute source includes an indication of the units in which the value of the attribute is expressed.” (column 16, lines 36-62).

With regard to claim 83:

As per “receiving the identified attribute from the attribute source includes an indication of the format in which the value of the attribute is expressed.” (column 16, lines 36-62).

With regard to claim 84:

As per “receiving an invocation request to provide an attribute value, the Invocation request to provide an attribute value identifying the attribute identified by the invocation request to register an attribute, the invocation request to provide an attribute value being, generated by a requesting attribute consumer; and in response to receiving the invocation request to provide an attribute value: using the generated indication of the specified manner of invoking the attribute source to obtain the identified attribute from the attribute source to invoke the attribute source to obtain the identified attribute from the attribute source, and providing the attribute value obtained from the attribute source to the requesting

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attribute consumer.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37;column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 85:

As per “the invocation request further specifies a name of the attribute, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified name of the attribute.” (column 16, lines 26-62).

With regard to claim 86:

As per “the invocation request further specifies a name of the attribute source, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified name of the attribute source.” (column 16, lines 26-62).

With regard to claim 87:

As per “the invocation request further specifies a data type of the attribute, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified data type of the attribute.” (column 16, lines 36-62).

With regard to claim 88:

As per “the invocation request further specifies an indication of a format of the attribute, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified format indication of the attribute.” (column 16, lines 36-62).

With regard to claim 89:

As per “A computer-readable medium whose contents cause a computing device to exchange context attributes by: receiving an invocation request to register an attribute, the invocation request being generated by an attribute source, the invocation request identifying the attribute to be registered; and in response to receiving the invocation request, generating an indication that the identified attribute can be obtained from the attribute source.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37; column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 90:

As per “the invocation request further specifies a manner of invoking the attribute source to obtain the identified attribute from the attribute source, and wherein the generated indication that the identified attribute can be obtained from the attribute source includes an indication of the specified manner of invoking the attribute source to obtain the identified attribute from the attribute source.” (column 20, lines 47-column 21, lines 54).

With regard to claim 91:

As per “the contents of the computer-readable medium further cause the computing device to use the indication of the specified manner of invoking the attribute source to obtain the identified attribute from the attribute source included in the indication that the identified attribute can be obtained from the attribute source to invoke the attribute source to obtain the identified attribute from the attribute source.” (column 20, lines 47-column 21, lines 54).

With regard to claim 92:

As per “invoking the attribute source to obtain the identified attribute from the attribute source includes an identification of the attribute.” (column 21, lines 19-46).

With regard to claim 93:

As per “the contents of the computer-readable medium further cause the computing, device to receive an invocation request to provide an attribute value, the invocation request to provide an attribute value identifying the attribute identified by the invocation request to register an attribute, the invocation request to provide an attribute value being generated by a requesting attribute consumer; and in response to receiving the invocation request to provide an attribute value: use the generated indication of the specified manner of invoking the attribute source to obtain the identified attribute from the attribute source to invoke the attribute source to obtain the identified attribute from the attribute source, and providing the attribute value obtained from the attribute source to the requesting attribute consumer.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37; column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 94:

As per “A computer memory containing an invocation data structure generated by an attribute source, the data structure representing an invocation request to register an attribute, and comprising an indication that the represented invocation request is a request for the invocation of a function to register an attribute; information identifying the attribute to be registered; and information identifying the attribute source, such that the data structure may be used to obtain the registered attribute from the attribute source.” (column 8, lines 62-column 9, lines 8; column 9, lines 24-37; column 17, lines 22-30; column 18, 41-column 19, lines 13; column 20, lines 3-14).

With regard to claim 95:

As per “the data structure further comprises information specifying a manner of invoking the attribute source to obtain the identified attribute from the attribute source, such that the data structure may be used to obtain the registered attribute from the attribute source by invoking the attribute source in the specified manner.” (column 9, lines 24-37).

With regard to claim 96:

As per “the data structure further comprises information specifying a name of the attribute.” (column 17, lines 5-30).

With regard to claim 97:

As per “the data structure further comprises information specifying a name of the attribute source.” (column 17, lines 5-30).

With regard to claim 110:

Claim 110, a method in a computing device claim, related to claim 1, thus rejected under the same rational.

With regard to claim 111:

As per “the provided indication of attribute consumers that are dependent on the identified attribute is the number of attribute consumers that are dependent on the identified attribute.” (column 12, lines 65-column 13, lines 59).

With regard to claim 112:

As per “the provided indication of attribute consumers that are dependent on the identified attribute is an indication of the identities of attribute consumers that are dependent on the identified attribute.” (column 12, lines 65-column 13, lines 59).

With regard to claim 113:

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Claim 113, a method in a computing device claim, related to claim 1, thus rejected under the same rational.

With regard to claim 114:

Claim 114, a method in a computing device claim, related to claim 1, thus rejected under the same rational.

With regard to claim 115:

As per “One or more computer memories collectively containing an attribute instance registration data structure reflecting a set of registered attribute instances, each attribute instance having a source having an identity, the data structure comprising a multiplicity of entries, each entry corresponding to a registered available attribute instance and containing information indicating: an attribute name for the registered attribute instance; and the identity of the source of the registered attribute instance, such that the data structure may be used to determine the attribute names and sources of registered attribute instances.” (column 11, lines 16-34; column 20, lines 3-46).

With regard to claim 116:

As per “a plurality of the multiplicity of entries each contain an indication of an earlier-retrieved value of the attribute instances to which they correspond.” (column 20, lines 30-46).

With regard to claim 117:

As per “the plurality of entries each further contain an indication of a time at which the earlier-retrieved value of the attribute instance was effective.” (column 10, lines 45-55; column 13, lines 41-59).

With regard to claim 118:

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As per “a plurality of the multiplicity of entries each contain an indication of a manner of invoking the source of the corresponding attribute instance to obtain a value for the attribute instance from the source.” (column 8, lines 62-column 9, lines 54).

With regard to claim 124:

As per “in response to receiving the invocation request, providing a name and a value of a property associated with the identified attribute to the requesting attribute consumer.” (column 16, lines 36-57).

With regard to claim 125:

As per “obtaining a value of a property associated with the identified attribute from the attribute source with which the identified attribute is associated.” (column 8, lines 62-column 9, lines 8; column 20, lines 54-67).

With regard to claim 126:

As per “providing the obtained associated property value to the requesting attribute consumer.” (column 8, lines 62-column 9, lines 8; column 20, lines 54-67).

With regard to claim 127:

As per “the obtained property is security information associated with the identified attribute, further comprising using the security information to determine whether to provide a value for the identified attribute to the requesting attribute consumer.” (column 13, lines 41-59; column 23, lines 61-67).

With regard to claim 128 :

As per “a selected entry contains information indicating a value of a property associated with the attribute instance to which the entry corresponds.” (column 16, lines 36-57).

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With regard to claim 129:

As per “the selected entry contains information indicating a name of the property associated with the attribute instance to which the selected entry corresponds.” (column 17, lines 31-43).

With regard to claim 130:

As per “the property value constitutes security information associated with the attribute instance to which the selected entry corresponds, such that the data structure may be used to determine whether to provide a value of the attribute instance to which the selected row corresponds to a particular attribute consumer.” (column 13, lines 41-59, column 23, lines 61-67).

*Allowable Subject Matter*

6. Claims 8, 13, 15, 19, 23, 24, 25, 27, 36, 37, 39-43, 45, 55, 77 and 80-83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter. Theimer fails to describe “providing uncertainty level for the identified attributed” of the limitation claims 8. The remaining claims, 39, 41, 45, and 80, while not necessary identical in scope, contain limitations similar to claim 8 and therefore are given similar indication of allowable reasons with claim 8.

While Theimer describes the environment of a computing device user, but Theimer fails to describe that “the identified attribute is the temperature of the environment” of the limitation of claim 13. The remaining claims, 19 and 23, while not necessary identical in scope, contain



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limitations similar to claim 13 and therefore are given similar indication of allowable reasons with claim 13.

Theimer also fails to describe “the identified attribute is the blood pressure of the user” of claim 15.

Theimer also fails to describe, among other things, “age of the attribute value “ of the limitation claim 24. The remaining claims, 25, 27, 36, and 37, while not necessary identical in scope, contain limitations similar to claim 24 and therefore are given similar indication of allowable reasons with claim 24.

Theimer also fails to describe, among other things, “determining a value of the identified attribute that is the average of the available values of the identified attribute” of the limitation of claim 40. The remaining claim, 42, while not necessary identical in scope, contain limitations similar to claim 40 and therefore are given similar indication of allowable reasons with claim 40.

Theimer further fails to describe , among others, “selecting the available value of the identified attribute that occurs the largest number of times” of the limitation of claim 43. The remaining claim, 77, while not necessary identical in scope, contain limitations similar to claim 43 and therefore are given similar indication of allowable reasons with claim 43.

Theimer also fails to describe, among other limitations, “the computing device further comprises an age determination subsystem that determines whether the age of the previously-obtained value of the identified attributes exceeds the specified maximum age in response to receipt to the invocation request by the invocation request receiver” of claim 55.

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Theimer also fails to describe<sup>4</sup>receiving the identified attribute from the attribute source includes an indication of the time at which the value of the attribute is most accurate” of claim 81.

Theimer also fails to describe<sup>6</sup>receiving the identified attribute from the attribute source includes an indication of the units in which the value of the attribute is expressed” of claim 82.

7. Claims 98-109 and 119-123 are allowed.

The following is an examiner’s statement of reasons for allowance: Theimer fails to disclose “a method in a computing device for exchanging context attributes, comprising: receiving an invocation request to create a condition based on an attribute, the invocation request identifying the attribute on which the condition is based, the invocation request specifying a test to perform on the identified attribute; and in response to receiving the invocation request, generating an indication of the condition, the generated indication identifying the attribute identified by the invocation s request and indicating the specified test.” (of claims 98-100).

Theimer also fails to disclose “A method in a computing device for exchanging context attributes, comprising: receiving an invocation request to create a condition monitor based on a condition, the invocation request identifying the condition on which the condition monitor is based, the invocation request specifying a test to perform on the identified condition monitor, the invocation request being generated by a requesting condition monitor consumer; and in response to receiving the invocation request, generating an indication of the condition monitor, the generated indication identifying the condition identified by the invocation request and indicating the specified test.” (of claims 101-109).

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Theimer also fails to disclose "One or more computer memories collectively containing a context attribute condition data structure, the data structure comprising a plurality of entries, each entry corresponding to a condition based upon an attribute and containing: information identifying the attribute upon which the condition is based; and information specifying the test to be performed on the identified attribute in order to evaluation the condition, such that the data structure may be used to evaluate the conditions to which its entries correspond." (of claims 119-120).

Theimer also fails to disclose "One or more computer memories collectively containing a context attribute condition monitor data structure, the data structure comprising a plurality of entries, each entry corresponding to a condition monitor based upon condition and containing: information identifying the condition upon which the condition monitor is based; and information specifying the test to be performed on the identified condition in order to determine whether the condition monitor has been triggered, s such that the data structure may be used to determine whether the condition monitors to which its entries correspond have been triggered." (of claims 121-123).

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

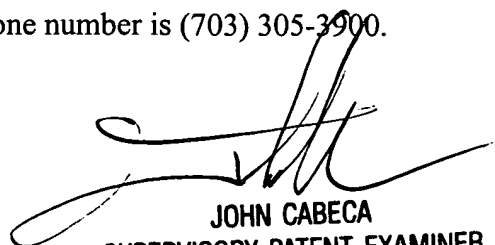
### CONCLUSION

9. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R § 1.111(c) to consider the reference fully when responding to this action. Kittaka (US 5,999,975), The documents cited therein describe similar limitations with most of the independent claims of the present invention, specially claim 1 of the present invention. '975 describes a method for providing information on-line between an information user device located at the user side and an information provider device located at an information provider side which is connected with the information with the information user device through network, the method includes, among other things, user sending information ID of a specific information to the information provider, the information provider receiving the sent request, and in response to receiving the request, the information provider providing a value for the identified attribute to the requesting user. (see Kittaka, Fig. 2, column 7, lines 25-column 8, lines 22; column 14, lines 28-65).

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (703) 306-2799. The Examiner can normally be reached on M-F from 10:00 - 6:30 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116 Art Unit 2173 CPK 2-4A51.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*Tadesse Hailu* November 24, 2003

  
JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
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